What Is Claimed Is:

1. An occupant protection system for a motor vehicle (1) having at least one crash sensor (S1) for measuring a motion variable (aS1) of the motor vehicle (1), the occupant protection system including an occupant protection device (15, 16) controllable via an ignition signal (CRASH, AIR, BELT), wherein the occupant protection system includes a control unit (2) for ascertaining the ignition signal (CRASH, AIR, BELT) as a function of a time average (v0S1) of the motion variable (aS1) measured by the crash sensor (S1), over at least one first time interval ($[t_0-\tau_0,t_0]$).

2. The occupant protection system as recited in Claim 1, wherein the motion variable (aS1) is an acceleration.

3. The occupant protection system as recited in Claim 1 or 2, wherein the ignition signal (CRASH, AIR, BELT) is ascertainable by the control unit (2) as a function of a time average (v0S1) of the motion variable (aS1) measured by the crash sensor (S1), over a second time interval ($[t_0-\tau_0-\tau_1,t_0-\tau_1]$) different from the first time interval ($[t_0-\tau_0,t_0]$).

4. The occupant protection system as recited in Claim 1, 2, or 3, wherein the ignition signal (CRASH, AIR, BELT) is ascertainable by the control unit (2) as a function of time averages (v0S1, v1S1, v2S1, v3S1) of the motion variable (aS1) measured by the crash sensor (S1), in two to twenty different time intervals ($[t_0-\tau_0,t_0]$, $[t_0-\tau_0-\tau_1,t_0-\tau_1]$, $[t_0-\tau_0-\tau_2,t_0-\tau_2]$, $[t_0-\tau_0-\tau_3,t_0-\tau_3]$).

5. The occupant protection system as recited in Claim 1 or 2, wherein the ignition signal (CRASH, AIR, BELT) is

ascertainable by the control unit (2) as a function of time averages (v0S1, v1S1, v2S1, v3S1) of the motion variable (aS1) measured by the crash sensor (S1), in two to five different time intervals ($[t_0-\tau_0,t_0]$, $[t_0-\tau_0-\tau_1,t_0-\tau_1]$, $[t_0-\tau_0-\tau_2,t_0-\tau_2]$, $[t_0-\tau_0-\tau_3,t_0-\tau_3]$).

6. The occupant protection system as recited in one of the preceding claims, wherein the time intervals ($[t_0-\tau_0,t_0]$, $[t_0-\tau_0-\tau_1,t_0-\tau_1]$, $[t_0-\tau_0-\tau_2,t_0-\tau_2]$, $[t_0-\tau_0-\tau_3,t_0-\tau_3]$) are between 1 ms and 200 ms long.

7. The occupant protection system as recited in one of the preceding claims, wherein the time intervals ($[t_0-\tau_0,t_0]$, $[t_0-\tau_0-\tau_1,t_0-\tau_1]$, $[t_0-\tau_0-\tau_2,t_0-\tau_2]$, $[t_0-\tau_0-\tau_3,t_0-\tau_3]$) are of essentially the same length.

8. The occupant protection system as recited in one of the preceding claims, wherein at least two time intervals ($[t_0-\tau_0,t_0]$, $[t_0-\tau_0-\tau_1,t_0-\tau_1]$, $[t_0-\tau_0-\tau_2,t_0-\tau_2]$, $[t_0-\tau_0-\tau_3,t_0-\tau_3]$) are staggered by between 1 ms and 50 ms.

9. The occupant protection system as recited in Claim 8, wherein the time intervals ($[t_0-\tau_0,t_0]$, $[t_0-\tau_0-\tau_1,t_0-\tau_1]$, $[t_0-\tau_0-\tau_2,t_0-\tau_2]$, $[t_0-\tau_0-\tau_3,t_0-\tau_3]$) are staggered by between 1 ms and 50 ms.

10. The occupant protection system as recited in one of the preceding claims, the occupant protection system including at least one additional crash sensor (S2) for measuring a motion variable (aS2) of the motor vehicle (1), wherein the ignition signal (CRASH, AIR, BELT) is also ascertainable by the control unit (2) as a function of at least one time average (v0S2) of the motion variable (aS2) measured by the additional crash sensor (S2), over a time interval ($[t_0-\tau_0,t_0]$).

11. A motor vehicle (1), wherein it has an occupant protection system as recited in one of the preceding claims.

12. A method for operating an occupant protection system for a motor vehicle (1), the occupant protection system including an occupant protection device controllable via an ignition signal (CRASH, AIR, BELT), wherein the ignition signal (CRASH, AIR, BELT) is ascertained as a function of a time average (v0S1) of a measured motion variable (aS1) over at least one time interval ($[t_0-\tau_0, t_0]$).